

AMENDMENTS TO THE CLAIMS

1-19. (Canceled)

20. (Currently Amended) A method of forming an integrated circuit comprising:

forming a performance circuit occupying a first well of an integrated circuit substrate;

forming a protection circuit occupying a second well of the integrated circuit substrate separate from the first well, wherein forming the protection circuit includes:

forming a plurality of unit cells, the plurality of unit cells separated from each other to form a plurality of islands in the second well surrounded by the ~~doped region~~second well, each of the plurality of unit cells comprised of:

a block of a first doped region of a first dopant in the second well of the integrated circuit substrate occupying an area of the substrate sufficient to support a contact to the doped region, the first doped region forming an anode of a diode,

a junction region of the integrated circuit substrate surrounding the first doped region and separating the first doped region from the second well, and

a contact to the doped region, wherein

~~the doped region being a first doped region of a first dopant in the second well of the substrate,~~

the second well ~~being~~is doped with a first concentration of a second dopant,

~~the junction region separating the first doped region from the second well,~~

forming a third doped region in the second well adjacent the junction region, the third doped region surrounding the plurality of cells and doped with a second concentration of the second dopant, the third doped region forming a cathode of the diode; and

coupling the protection circuit to the performance circuit.

21. (Previously Presented) The method of claim 20, wherein forming a performance circuit includes forming a CMOS configuration.

22. (Previously Presented) The method of claim 21, wherein coupling the protection circuit to the performance circuit includes coupling the protection circuit to a p-channel device of the CMOS configuration.

23. (Currently Amended) The method of claim 21, wherein forming a protection circuit includes forming ~~the~~ a diode and coupling the protection circuit to the performance circuit includes coupling the diode to a p-channel device of the CMOS configuration.

24-25. (Canceled.)

26. (Currently Amended) The method of claim 20, wherein forming a protection circuit includes forming a plurality of unit ~~diodes~~ cells.

27. (Currently Amended) A method of forming an integrated circuit comprising:

forming a first protection circuit on the integrated circuit substrate;

forming a performance circuit occupying a first well of an integrated circuit substrate, wherein forming a performance circuit includes:

forming a unit transistor device having a drain region comprised of a first doped region of the integrated circuit substrate occupying an area sufficient to support a contact to the first doped region;

forming a gate region of the integrated circuit substrate surrounding the first doped region; and

forming a contact to the first doped region;

forming a second protection circuit occupying a second well of the integrated circuit substrate separate from the first well, the second protection circuit including a plurality of unit cells forming a plurality of islands in the second well surrounded by a second doped region; and

coupling the second protection circuit between the first protection circuit and ~~to~~ the performance circuit ~~contact~~.

28. (Currently Amended) The method of claim 27, wherein the first doped region ~~being a first~~ is doped region with of a first dopant in ~~a~~ the first well of the substrate, the first well being doped with a concentration of a second dopant and wherein forming a performance circuit further comprises:

forming a source region of the transistor doped with the first dopant in the first well separated from the drain region by the gate to form a unit transistor.

29. (Previously Presented) The method of claim 28, wherein forming a performance circuit includes:

forming a plurality of unit transistors.

30. (New) A method of forming an integrated circuit comprising:

forming a performance circuit occupying a first well of an integrated circuit substrate;

forming a protection circuit occupying a second well of the integrated circuit substrate separate from the first well, wherein forming the protection circuit includes:

forming a plurality of unit cells, the plurality of unit cells separated from each other to form a plurality of islands in the second well surrounded by the second well, each of the plurality of unit cells comprised of:

a block of a first doped region of a first dopant in the second well of the integrated circuit substrate occupying an area of the substrate sufficient to support a contact to the doped region,

a junction region of the integrated circuit substrate surrounding the first doped region and separating the first doped region from the second well, and

a contact to the doped region, wherein the second well is doped with a first concentration of a second dopant,

forming a third doped region in the second well adjacent the junction region, the third doped region surrounding the plurality of cells and doped with a greater concentration of the second dopant; and

coupling the protection circuit to the performance circuit.

31. (New) The method of claim 30, wherein forming a performance circuit includes forming a CMOS configuration.

32. (New) The method of claim 31, wherein coupling the protection circuit to the performance circuit includes coupling the protection circuit to a p-channel device of the CMOS configuration.

33. (New) The method of claim 31, wherein forming a protection circuit includes forming the diode and coupling the protection circuit to the performance circuit includes coupling the diode to a p-channel device of the CMOS configuration.

34. (New) The method of claim 30, wherein forming a protection circuit includes forming a plurality of unit cells.

35. (New) The method of claim 30, wherein the first concentration of a second dopant forms an N-type material in the second well.

36. (New) The method of claim 30, wherein the second concentration of the second dopant forms an N⁺ material in the third doped region.